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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,864	03/18/2004	Takeshi Funahashi	Q80378	5446
23373 7590 04/15/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
MOLINA, ANITA C				
ART UNIT		PAPER NUMBER		
3626				
MAIL DATE		DELIVERY MODE		
04/15/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/802,864

Applicant(s)

FUNAHASHI, TAKESHI

Examiner

ANITA MOLINA

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Notice to Applicant

This is a final action on the merits. In the amendment filed 12/16/2008, the following occurred: claims 1-20 are pending, no claims were amended, no claims were cancelled, claims 12-20 are new.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings were received on 03/18/2004. These drawings are acceptable.

Claim Rejections - 35 USC § 112

3. The U.S.C. 112 rejection has been withdrawn because the Applicant's arguments were persuasive. The Examiner agrees that one of ordinary skill would be able to forecast a "second area" even though the claims fail to specifically indicate how that area is forecasted.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention does not lie within one of the four classes of statutory subject matter. The claimed invention does fall within the judicial

exception category of an abstract idea. The invention does not transform an article or physical object, and it does not produce any useful, concrete, and tangible result. As shown by Haggett, there are many ways to predict the geographical spread of a disease (see: at least Figures 1 and 2). The unspecified method of forecasting an area where a disease is supposed to spread in the does not produce a repeatable and predictable result. Therefore, claim 10 is not allowable subject matter.

1. Also, claim 10 is rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In *re Bilsky*, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008), *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876).

2. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

3. Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to a particular machine and can be performed without the use of a particular apparatus. Furthermore, the method steps fail to transform

underlying subject matter to a different state or thing. The mere construction of non-functional descriptive material (i.e., a forecasted area) is not a transformation because an area is not statutory subject matter. Thus, claim 10 is non-statutory since it is not tied to a particular machine and it does not transform underlying subject matter to a different state or thing.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-6, 8-11, 12, 14, 16, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett.

As per claim 1, McNair teaches **a medical network server for receiving and transmitting information on electric medical charts from/to a plurality of medical institutions through a communication network, comprising:**

-a patient information storage section storing thereon the information on the electric medical charts including medical records of a plurality of patients diagnosed by a physician at each of the plurality of medical institutions, and location information indicating location of each of the medical institutions or addresses of patients (see: paragraphs 86 and 50);

McNair fails to teach:

-an incidence rate computing section for computing incidence rate of a disease in each area based on the medical records and the location information of the plurality of patients; and

-a spread area identification section for identifying a first area, where the disease spreads, based on the incidence rate computed by said incidence rate computing section.

Mault teaches calculating the incidence of infectious diseases in certain populations (in geographic areas) based on information reported to a computer system (see: paragraph 40 and 41) and detecting infectious diseases and their geographic spread (see: paragraph 40). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the computing of disease incidence and detecting the spread of that disease as taught by Mault because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

McNair fails to teach **a spread area forecast section for forecasting a second area, related to the first area with respect to the spread of the disease and in which the disease is supposed to spread in the future, based on a relationship between the first area and the second area.** Haggett teaches many different ways that the spread of a disease in a geographic area can be predicted (forecasted) based

on the relationship between a first area and second area (see: at least Figure 2). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the forecasting of the disease spread as taught by Haggett because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 2, McNair fails to teach the claimed medical network server, **wherein said spread area forecast section forecasts the second area based on outbreak history information including the incidence rate of the disease in each of the areas during a plurality of time periods in the past.** Haggett teaches using past epidemic behavior (which would include the incidence rates at specific times and in specific areas) to predict the spread of a current epidemic (see: page 17, Discussion section, point 3). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the forecasting of the disease spread based on outbreak history as taught by Haggett for the same reasons set forth for claim 1.

As per claim 4, McNair fails to specifically teach the claimed medical network server, **further comprising an outbreak forecast information storage section storing thereon the outbreak forecast information, wherein said spread area forecast section forecasts the second area based on the outbreak forecast information stored on said outbreak forecast information storage section.**

McNair teaches storage for the information used in a system that detects outbreaks (see: paragraph 86). Haggett teaches using such information as described by McNair (such as geographic location as pointed out for claim 1) in predicting the spread of a disease (see: at least page 7, Spatial prediction heading). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the forecasting of the disease spread as taught by Haggett for the same reasons set forth for claim 1.

As per claim 5, McNair fails to teach the claimed medical network server, **wherein said spread area forecast section further forecasts a time period when the disease will spread in the second area based on the outbreak history information.** Haggett teaches using breakout history to detect the time period of the approach of an epidemic (see: first two paragraphs, page 14). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the forecasting timing of the disease spread as taught by Haggett for the same reasons set forth for claim 1.

As per claim 6, McNair fails to teach the claimed medical network server, **further comprising a warning section for issuing warning to the medical institution located in the second area forecasted by said spread area forecast section in order to prompt the medical institution located in the second area forecasted by said spread area forecast section to prepare for the spread of the disease in the future.** Mault teaches providing healthcare providers with information to prepare for emerging healthcare demands (warning information) indicated by monitored disease

progression (see: paragraph 41). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the warning information as taught by Mault for the same reasons set forth for claim 1.

As per claim 9, McNair teaches **a medical network system for relaying information on electric medical charts through a communication network, i0 comprising:**

-a plurality of medical institutions storing therein the electric medical charts (see: paragraph 11); and

-a medical network server for receiving and transmitting the information on the electric medical charts from/to the plurality of medical institutions through the communication network, wherein said medical network server comprises (see: paragraph 84):

--a patient information storage section storing thereon the information on the electric medical charts including medical records of a plurality of patients diagnosed by a physician at each of the plurality of medical institutions, and location information indicating location of each of the medical institutions or addresses of patients (see: paragraphs 86 and 50);

McNair fails to teach:

--an incidence rate computing section for computing incidence rate of a disease in each area based on the medical records and the location information of the plurality of patients; and

--a **spread area identification section for identifying a first area, where the disease spreads, based on the incidence rate computed by said incidence rate computing section.**

Mault teaches calculating the incidence of infectious diseases in certain populations (in geographic areas) based on information reported to a computer system (see: paragraph 40 and 41) and detecting infectious diseases and their geographic spread (see: paragraph 40). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the computing of disease incidence and detecting the spread of that disease as taught by Mault for the same reasons set forth for claim 1.

McNair fails to teach a **spread area forecast section for forecasting a second area, related to the first area with respect to the spread of the disease and in which the disease is supposed to spread in the future, based on a relationship between the first area and the second area.** Haggett teaches many different ways that the spread of a disease in a geographic area can be predicted (forecasted) based on the relationship between a first area and second area (see: at least Figure 2). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the forecasting of the disease spread as taught by Haggett for the same reasons set forth for claim 1.

As per claims 10 and 11, they are rejected for the same reasons set forth for claim 1.

As per claim 12, McNair fails to teach the claimed network server, **wherein the spread area forecast section which forecasts the spread of the disease, bases the forecasting the second area on 1) a frequency of movement of people who are infected with the disease from the first area to the second area, and 2) simulation of how the disease will spread from the first area to the second area.** Hagget teaches using the frequency distribution of distances traveled by foxes to predict the propagation of rabies across geographical space (see: page 14, second column). Hagget also teaches estimating the speed of disease spread while modeling (simulating) geographical variation (see: page 14, second column). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the use of frequency of movement and a simulation to forecast disease spread as taught by Haggett for the same reasons set forth for claim 1.

As per claim 14, it is rejected for the same reasons set forth for claim 1.

As per claim 16, McNair teaches the claimed network server, **further comprising:**

-a warning section which issues a warning to the medical institutions located in the second area that is forecasted by said spread area forecast section, to prompt the medical institutions to prepare for spread of the disease, by using an address stored on said medical institution information storage section in association with the area forecasted by said spread area forecast section (see: Figure 1C). Also, Mault teaches providing healthcare providers with information to prepare for emerging healthcare demands (warning information) indicated by monitored

disease progression (see: paragraph 41). It would have been obvious to one of ordinary skill in the art to include in the patient information storing and alert system of McNair, the warning information as taught by Mault for the same reasons set forth for claim 1.

As per claim 18, McNair fails to teach the claimed network server, **wherein the warning is automatically generated based on a daily prediction forecast of the second area**. McNair does teach alerting affected areas of a probable bioterrorism incident (based on the incidence rate computed) (see: Figure 1C). Haggett teaches daily forecasting based on early maps (including both first and second areas, see Figure 2) of the past and how they change over time in the past (see: page 9, first column). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the daily forecasting based on past data as taught by Hagget for the same reasons set forth for claim 1.

As per claim 20, it is rejected for the same reasons set forth for claim 6.

7. Claims 3, 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett and in view of US 7,343,302 to Aratow et al, hereinafter, Aratow.

As per claim 3, McNair fails to teach the claimed medical network server, **wherein said spread area forecast section forecasts the second area based on frequency of traffic between the first area and the second area**. Aratow teaches a system that tracks bio-terror threats and their impacts on things such as volumes at

hospitals and emergency departments (disease incidence) using crowd behavior, disease distribution, and traffic flow to predict areas of greatest potential yield (see: column 10, lines 5-20). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the use of traffic patterns to determine disease incidence as taught by Aratow because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 7, McNair fails to teach the claimed medical network server, **further comprising a medical device indicating section for indicating medical devices required by the medical institution for diagnosis and treatment of the disease to the medical institution**. Aratow teaches a system that uses icons to direct hospital resources (medical devices) to best serve emergency needs in a possible outbreak (see: column 9, lines 37-47). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the indication of needed resources as taught by Aratow for the same reasons set forth for claim 3.

As per claim 19, it is rejected for the same reasons set forth for claim 7.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett and in view of US 7,343,302 to Aratow and in view of US 7,197,481 to Yamamoto et al, hereinafter, Yamamoto.

As per claim 8, McNair fails to teach the claimed medical network server, **wherein said medical device indicating section further indicates quantity of the medical devices required by the medical institution for diagnosis and treatment of the disease to the medical institutions based on the incidence rate computed by said incidence rate computing section.** Determining a quantity of a product needed to meet demand requirements is an old idea. For example, Yamamoto teaches a system that uses sales information (information indicating a requirement much like an incidence rate of a disease) for determining the quantity of a product to be manufactured. It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the use of information to determine the quantity demand of a product as taught by Yamamoto because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett and in view of Gibson.

As per claim 13, McNair fails to teach the claimed network server, **wherein said spread area forecast section forecasts a daily prediction forecast of the second area based on historical incidence rate data for a prior year of the first area and the second area.** Haggett teaches daily forecasting based on early maps (including

both first and second areas, see Figure 2) of the past and how they change over time in the past (see: page 9, first column). Furthermore, Gibson teaches predicting the probability of disease of an individual over time (forecast) based on data on an individual (second area) in some neighborhood (first area and second area together) at a previous time (see: page 1, first paragraph). Gibson further teaches using distribution measurements of CTV (tree disease) each year to determine a directionality of the spread (see: page 1, last paragraph of first column – first paragraph of second column). It would have been obvious to one of ordinary skill in the art to include in the patient information storing system of McNair, the daily forecasting based on past data as taught by Haggett, and the use of a prior years data for two areas to predict the spread of disease as taught by Gibson because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett and in view of US 2002/0019749 to Becker et al, hereinafter, Becker.

As per claim 15, McNair teaches the claimed network server, **further comprising:**

-a warning section which warns that the disease may spread by sending an e-mail to the addresses stored on said medical institution information storage section **in**

association with the second area forecasted by said spread area forecast section
(see: Figure 1C).

McNair fails to specifically teach a **medical institution information storage section which stores addresses of said medical institutions in association**. Becker teaches a directory of health care providers e-mail addresses and sending providers email notifications (see: paragraph 117). It would have been obvious to one of ordinary skill in the art to include in the patient information storing and alert system of McNair, the email address storage and notification as taught by Becker because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0236604 to McNair in view of US 2003/0129578 to Mault and in view of Haggett and in view of US 2002/0019749 to Becker and in view of US 7,197,481 to Yamamoto.

As per claim 17, McNair fails to specifically teach the claimed network server, **further comprising:**

-a medical device indicating section which attaches information to an e-mail to the medical institutions indicating a quantity of medical devices required and the medical devices required by the medical institutions for the diagnosis or treatment of the disease based on the incidence rate computed by said incidence

rate computing section and each scale of the medical institutions by attaching information which indicates the required medical devices to an e-mail.

McNair does teach alerting affected areas of a probable bioterrorism incident (based on the incidence rate computed) (see: Figure 1C). Becker teaches attaching information to an email send to a medical provider (see: paragraph 117). Mault teaches providing healthcare providers with information to prepare for emerging healthcare demands (warning information) indicated by monitored disease progression (see: paragraph 41). Yamamoto teaches a system that uses sales information (information indicating a requirement much like an incidence rate of a disease) for determining the quantity of a product to be manufactured (see: abstract). It would have been obvious to one of ordinary skill in the art to include in the alerting of McNair, the email attachment as taught by Becker, and the preparation warning by Mault, and the quantity determination as taught by Yamamoto because the claimed invention is merely a combination of old elements, and in the combination, each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

The system is not affected by the information contained in the email. Therefore, no patentable weight is given to the information because it is nonfunctional and a new and unobvious functional relationship between the nonfunctional material (attached information) and the substrate (the claimed system) is absent (see: MPEP 2601.01).

Response to Arguments

12. Applicant's arguments filed 12/16/2009 have been fully considered but they are not persuasive.

Claim 10

13. In response to Applicant's arguments regarding U.S.C. 101 and claim 10, the Examiner respectfully disagrees and points out that the process of claim 10 may not produce the same result given a particular clinical data set because the relationship between the first and second areas remains broad. While one of ordinary skill in the art would have been able to arrive at a forecasted second area, this area will differ depending on what kind of relationship is used. For example, one person may forecast using distance between the areas as the defining relationship, while another may take into account differences in population density as well as distance. The Applicant is reminded that when an abstract idea (a judicial exception) is claimed broadly, it often fails the U.S.C. 101 practical application requirement of producing a concrete result.

Claim 1

14. In response to Applicant's arguments that McNair and Mault fail to teach "computing incidence rate of a disease in each area based on the medical records," the Examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Furthermore, while Applicant argues that there is no motivation to combine the references, a motivation to combine is not argued in the Office Action. The rationale to combine the references is stated in the above rejection.

15. In response to applicant's argument that the functionality of Haggett's statistical study and McNair's would be different if combined because of the different time scales, the Examiner notes that the time scales are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

16. In response to Applicant's argument that Haggett does not teach a forecast "based on a relationship between the first area and the second area," the Examiner respectfully disagrees and submits that Haggett, as obvious to one of ordinary skill in the art can see in Figure 2, bases his forecast at least on proximity between (a relationship) the first and second areas.

Claim 2

1. Applicant argues that Haggett, on page 17, Discussion section, point 3, describes that past epidemic behavior is used to establish whether a system of interest has been effective in predicting past epidemic behavior. However, the Examiner notes that the past epidemic behavior is being used to establish the most effective forecast models. Therefore, Haggett does teach a "spread area forecast section forecasts the second area based on outbreak history information including the incidence rate of the disease in each of the areas during a plurality of time periods in the past."

Claim 4

2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim 5

3. In response to the applicant's arguments that Haggett fails to teach the elements of claim 5, the Examiner respectfully disagrees. The fact that the models lagged in time of cases reported, indicates that the models forecasted expected time periods of epidemic spread.

Claim 6

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., not requiring a healthcare provider to interpret the data in order to prepare) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, McNair does teach issuing an alert to authorities (see: Figure 1C).

Claim 3

5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim 7

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANITA MOLINA** whose telephone number is (571)270-3614. The examiner can normally be reached on **Monday through Friday 8am to 5:30pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, C. Luke Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M./
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